Representing City and County Governments of the San Francisco Bay Area



MEMO

Submitted by: Judy Kelly, Director, San Francisco Estuary Project

Subject: Executive Board Approval to Enter into Subcontracts for Estuary 2100 Grant

Date: May 6, 2009

Executive Summary

The Association of Bay Area Governments (San Francisco Estuary Project) applied for and was awarded a grant from the US.EPA in the amount of \$4,922,000 under the San Francisco Bay Water Quality Improvement Fund in late 2008. The Board authorized this application and entering into the grant agreement at its meeting of July 18, 2008.

At this time, we request approval for the Executive Director or his designee to enter into contract agreements for the following projects that were included as partnerships for implementation under this grant agreement:

Stonybrook Creek Bio-Engineered Bank Stabilization The Alameda County Flood Control District will stabilize the banks of Stonybrook Creek, an upper watershed tributary to Alameda Creek, in three locations. These efforts will decrease turbidity and fine sediment, which are detrimental to sensitive species, including the federally-listed endangered steelhead trout. Reducing sediment loads and turbidity in the creek will contribute to the significant multi-agency effort underway to re-establish a thriving population of the native steelhead in the watershed. *Implementer:* Alameda County Flood Control District *Funding:* Estuary 2100 \$147,750 / \$268,460 in kind match Alameda County Flood Control District *Total Budget:* \$416,210

Bahia Restoration & Revegetation Project This project will enhance the habitat value of an important area of seasonal tidal marsh at Bahia Marsh in Marin County, over a three-year period. Work will focus on growing and planting 40,920 native plants, which will help establish upland transition zones adjacent to the existing tidal wetlands. This additional vegetation will contribute to a more ecologically complete and resilient wetland habitat attractive to the federally-listed, endangered California Clapper Rail, salt marsh harvest mouse, and other fauna. *Implementer:* Marin Audubon Society *Funding:* Estuary 2100 \$56,000 / \$40,638 Combined Partner Match from Forrest and Frances Lattner Foundation, Patagonia, Wildlife and Fisheries Advisory Committee, National Audubon Society *Total Budget:* \$96,638

Candlestick Point State Recreation Area, Yosemite Slough Wetlands Restoration Bay Youth for the Environment, a wetland education program under the auspices of the California State Parks Foundation, will propagate and plant 5,000 to 6,000 native species in the Yosemite Slough Wetlands, the largest contiguous wetland area in the City and County of San Francisco. This project offers a unique combination of training in wetland ecology, horticultural techniques, nursery operations, as well as general life/professional skills development for local youth from the under-served Hunters' Point community. At the same time, it restores an area of the Bay where urban impacts to wetlands have been among the most severe; the project site is currently undergoing remediation to remove toxic sediment, which stormwater runoff currently washes to the Bay during high rainfall events. *Implementer:* California State Parks Foundation *Funding:* Estuary 2100 \$98,500 / Partner combined match of \$800,103 from Richard and Rhonda Goldman Foundation, Adobe Foundation, Bechtel Foundation, Hass Sr. Foundation *Total Budget:* \$898,603

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Senador Mine Erosion Control In the 1990's, Santa Clara County, under the direction of California Department of Toxic Substance Control, assessed former mercury mining sites at Almaden Quicksilver County Park, and remediated certain sites. Although the Senador mine site was one of the remediated sites, the area continues to add to the mercury load in Guadalupe watershed, which drains to the South Bay Salt Ponds. The County will undertake a variety of erosion control strategies, including regrading and planting, to minimize mercury-laden sediment from entering the watershed as required to implement the Guadalupe River Watershed Mercury TMDL. *Implementer:* Santa Clara County *Funding:* Estuary 2100 \$492,500 / \$226,000 in kind match Santa Clara County *Total Budget:* \$718,500

Shoreline Habitat Restoration At Eden Landing Ecological Reserve in Hayward and Martin Luther King Jr. Regional Shoreline in Oakland, trained community volunteers directed by staff of Save the Bay will establish and enhance tidal marsh transition zone habitat for recovery of endangered species and improved water quality. MLK Shoreline is at the confluence of five urban creeks, and a magnet for thousands of stewardship volunteers; Eden Landing Ecological Reserve is at the mouth of Alameda Creek, where additional upstream restoration activities are underway to benefit salmon and steelhead. *Implementer:* Save the Bay *Funding:* Estuary 2100 \$197,000 / \$140,000 in kind match Save the Bay *Total Budget:* \$337,000

Protecting Instream Flows for Fish in the North Bay Over one year, the California Land Stewardship Institute will evaluate experimental approaches to providing frost protection to vineyards in order to reduce springtime water diversions in the North Bay. Future efforts will develop best management practices from the successful approaches and promote the BMPs to vineyard owners. Reducing stream diversions for frost control should help maintain stream-flow levels which are vital to young fish during a very vulnerable stages in their development. *Implementer:* California Land Stewardship Institute *Funding:* Estuary 2100 \$98,500 / Match of \$25,000 from CALFED Ecosystem Restoration Grant to CSLI *Total Budget:* \$123,500

Stream Management Program for Landowners Reducing the amount of sediment in creeks and streams is essential to supporting and reestablishing viable populations of salmonids. The importance of such efforts is underscored by a growing number of TMDLs for sediment in Bay Area streams and by the identification of excessive sediment as a priority issue in the CCMP. This unique program, directed by the Urban Creeks Council (UCC), will assist creekside property owners in implementing state-of-the-art erosion control techniques that will protect their property and reduce sedimentation in key watersheds. Approaches include redesigning and revegetating stream channels, minimizing soil disturbances, and restoring soil-food web relationships.

Implementer: Urban Creeks Council Funding: Estuary 2100 \$393,998 / in kind match Alameda, Contra Costa, Marin County Public Works Agencies \$400,000 Total Budget: \$793,998

Littorina Eradication Project This project aims to stop a new invasive species before it becomes a large-scale problem. To prevent the exotic snail Littorina littorea from establishing itself in San Francisco Bay, volunteers will remove the snails from areas with known, incipient populations. Littorina species will be studied to determine the best control strategies to prevent them from becoming fully established. New outreach materials will help inform the public and encourage reporting of future sightings. Implementer: SFEI Funding: Estuary 2100 \$25,000 Total Budget: \$25,000

Invasive Spartina Project This critical project will complete ongoing efforts by the California Coastal Conservancy to reduce the last 150 acres of baylands infested with invasive Spartina to zero net acres, an unprecedented accomplishment achieved through the coordinated work of numerous public agencies and private nonprofit organizations over the last decade. Control and eradication of Spartina is particularly important to support broader efforts around the Bay to restore wetlands because this species spreads rapidly, crowding out native cordgrass and other plants and simplifying our wetland ecosystems, which makes them less able to support a healthy range of native flora and fauna, including the endangered California Clapper Rail. Implementer:

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California Coastal Conservancy & Partners *Funding:* Estuary 2100 \$172,375 / \$87,500 in kind match Coastal Conservancy *Total Budget:* \$259,875

Innovative Wetland Adaptation Techniques in Lower Corte Madera Creek Watershed BCDC will study the effects of sea level rise and the impact of the local sediment budget on wetland restoration in the watershed. Outcomes will include wetland restoration strategies that will increase resilience to, and mitigation of, climate change impacts on water quality. *Implementer:* BCDC and consultants, *Funding:* Estuary 2100 \$591,000 / Partner match \$640,000 in kind Marin County Public Works Department *Total Budget:* \$1,231,000

Habitat Evolution Monitoring Pilot Program, and Pond A8 Muted Tidal Restoration The Habitat Evolution Monitoring Pilot Project will use remote sensing technology to map and analyze vegetation, mudflat, and channel evolution in the South Bay Salt Ponds as restoration progresses. These findings will be essential in evaluating baylands restoration approaches and methodologies under changing conditions. The Pond A8 Project will introduce muted tidal action from Alviso and Guadalupe Sloughs to create approximately 1,400 acres of shallow subtidal habitat in Ponds A5, A7, and A8. This will be accomplished by construction of a 40-ft wide notch at the southern end of Pond A8 and an approximately 475-foot-long pilot channel through the fringe marsh of Alviso Slough. This Project is necessary to determine how tidal marsh can be safely restored in Alviso Slough, which has a legacy of mercury contamination from the Guadalupe River. *Implementer:* South Bay Salt Ponds: *Funding:* Estuary 2100 \$403,850 / Partner Match \$1,144,000 from California Prop. 40 grant to the Santa Clara Valley Water District *Total Budget:* \$1,547,850

Bay Area Stream Channel Restoration Design Curves The Waterways Restoration Institute will develop a critical design tool that will guide the stream restoration projects around the Bay Area. Regional "restoration curves" indicate the appropriate width and depth of a restored stream channel that will achieve equilibrium stability and avoid excessive erosion, deposition, and flooding. The curves will be developed through field research, analysis of rainfall and flow data, and watershed size, using representative streams in Marin and Sonoma Counties. This project will not only enhance the opportunities for success of the projects described in this proposal, but the results can also be used for future restoration projects throughout the Estuary. The San Francisco Bay Regional Water Quality Control Board will publish them as part of its water quality permit and stream protection programs. *Implementer:* Waterways Restoration Institute *Funding:* Estuary 2100 \$30,000 *Total Budget:* \$30,000

Modeling, Monitoring, and Reporting San Francisco Estuary Institute (SFEI) will implement a project QAPP (Quality Assurance Project Plan) to track Estuary 2100 projects to establish monitoring protocols and report outputs and outcomes. SFEI will target monitoring and modeling on a group of projects that should demonstrate results within the required time frame: Shoreline Habitat Restoration (photo documentation and monitoring design of native plant recovery); Bahia Restoration and Revegetation (monitoring and design review, and monitoring program implementation support); Littorina Eradication Project (develop long-term eradication monitoring program & public outreach success monitoring); Protecting Instream Flows for Fish in the North Bay (develop pre- and post-BMP monitoring program to assess flows); Senador Mine Erosion Control (work with RWQCB and Santa Clara County Parks to develop a meaningful and cost effective long-term monitoring plan). Implementer: SFEI Funding: Estuary 2100 \$246,250 / SFEI in kind match \$45,000 Total Budget: \$291,250

Green Solution Project will quantify and identify suitable public lands in two Bay Area counties for conversion from impervious to pervious land cover, and retrofit to serve as seasonal retention/filtration areas for urban/stormwater runoff—and also achieve additional public benefits. As has been demonstrated in other California communities, such lands can act as natural pollutant filters and treatment areas, while meeting needs for parks, playing fields, and wildlife habitat. This project will be expanded to other counties as funding permits. *Implementer:* Community Conservancy International *Funding:* Estuary 2100 \$246,250 / California Coastal Conservancy match \$250,000 *Total Budget:* \$496,250

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Keep It Clean will collaborate with Bay Area local governments to promote and replicate proven Bay-friendly best management practices and outreach strategies. Working directly with several cities, Save The Bay will provide tools to better protect San Francisco Bay and its watersheds from runoff pollution, and will partner with ABAG, SFEP, and the Regional Water Board to strengthen regional support networks for water quality improvement. Save The Bay will also expand its innovative outreach and engagement strategies to the general public, in order to promote Bay-friendly behavior by area residents. The project will track success and conduct outreach to additional cities based upon successes. *Implementer:* Save the Bay *Funding:* Estuary 2100 \$394,000 request / Partner matches totaling \$480,000 from Richard & Rhoda Goldman Fund, Rose Foundation, Oracle, and TEAK Motion Visuals *Total Budget:* \$874,000

Bayview Model Block Project Architecture for Humanity, a non-profit network of design professionals, has designed a traffic-calming, community building, street-greening project for the 1700 block of Newcomb Avenue in San Francisco's low-income Bayview district. This Estuary 2100 project will implement the design for a green streetscape, planting trees and other drought tolerant plants and installing specially designed stormwater-filtering planters to infiltrate stormwater runoff, and traffic chicanes to calm traffic and create community gathering places. The City and County of San Francisco will monitor the project to quantify reductions in stormwater runoff due to green infrastructure improvements, and develop a template for future projects. *Implementer:* City and County of San Francisco *Funding:* Estuary 2100 \$492,500 request / in kind match \$800,000 *Total Budget:* \$1,292,500

Recommended Action

Authorization for the Executive Director or his designee to enter into contract agreements for the Estuary 2100 projects that were included as partnerships for implementation under this grant agreement.

Next Steps

SFEP will finalize contracts for the project partners so work can begin.